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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Pamela Boyer

Serial No.: 09/639,055

Group Art Unit 3634

Filed: August 5, 2000

Examiner: A. Chin Shue

For: "Safety Harness"

Date: August 15, 2005

To the Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

Box: Appeals

SUBSTITUTE APPEAL BRIEF

Sir:

This is a Substitute Appeal Brief following Notice of Appeal mailed by the applicant on January 14, 2002 and received in the USPTO on February 13, 2002. The Substitute Appeal Brief is also in response to communication dated July 14, 2005. It is believed that this Substitute Appeal Brief is in full compliance with both 37 C.F.R. 1.192(c) **and** 37 C.F.R. 41.37(c). The appellant brings attention of the Examiner to the BPAI Rules of Practice, which specifically state: "An appeal Brief filed prior to September 13, 2004 must either be in compliance with the requirements set forth in former § 1.192 or new §41.37(c)." Since this appeal has been originally filed in February of 2002, the applicant has a choice of complying with either 37 C.F.R. 1.192(c) **and** 37 C.F.R. 41.37(c). In the overabundance of caution, and to expedite matters in this appeal, the applicant presents this new Substitute Appeal Brief is in full compliance with both 37 C.F.R. 1.192(c) **and** 37 C.F.R. 41.37(c). A new Appeal Brief follows:

I. REAL PARTY IN INTEREST

The applicant Pamela Boyer is the real party in interest in this Appeal.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1 - 4, 22 and 23 are pending in the application. Claims 1 – 4, 22 and 23 were finally rejected. Claims 1 – 4, 22 and 23 are appealed.

IV. STATUS OF AMENDMENTS

An amendment to obviate Section 112, second paragraph rejection was filed subsequent to final rejection. Claims 1 and 3 were amended. The applicant also added the word “co-extensively” in Claim 1 to better define the instant invention and in response to Examiner’s **completely new grounds of rejection set forth in the final Office Action**. Claims 22 and 23 were added.

In the Advisory Action of November 6, 2001, Examiner Alvin C. Chin-Shue indicated that the amendments subsequent to final rejection **will be entered**. However, in the communication dated January 14, 2005, Examiner asserts that he “mistakenly overlooked” the added limitation. Since this Appeal has been pending in the Patent Office for about three years, and the claims, with the entered amendments, have been pending before the Appeal Board for over three years, equity dictates that these amendments be considered as entered and the Examiner’s Answer be finally issued.

V. SUMMARY OF CLAIMED SUBJECT MATTER

One independent claim is involved in this appeal. Concise explanation of the subject matter, with reference to each element of the claim is presented below:

A safety harness (page 5, line 7, numeral #12 in Figs. 1-5 and page 6, line 19, # 60 in Figs. 6 and 7) comprises a body harness assembly (page 5, line 7, numeral #12 in Figs. 1-5 and page 6, line 19, # 62 in Figs. 6 and 7) positionable on a user's body (page 5, line 8, Fig. 2). The body harness assembly comprises a left shoulder strap (page 5, line 11, # 26 and page 6, line 22, # 66 in Fig. 6) and a right shoulder strap (page 5, line 11, # 24 and page 6, line 22, # 64 in Fig. 6), said shoulder straps crossing in a back side of the body harness, while sliding through a lanyard securing member page 5, line 18, # 40 in Fig. 5; page 7, line 8, # 88 in Fig. 7). The harness also comprises a resilient suspender assembly (page 5, line 22, ## 40, 42 in Figs. 3, 4; page 7, line 10, # 14 in Fig. 6) having a first branch (Page 7, line 11, #92 in Fig. 6) and a second branch (Page 7, line 11, #90 in Fig. 6), a front end of the first branch being fixedly attached to the left shoulder strap (page 7, line 12, # 96 in Fig. 6), a front end of the second branch being fixedly attached to the right shoulder strap (page 7, line 12, # 94 in Fig. 6), a back end of the first branch and a back end of the second branch being fixedly attached to the lanyard securing member (page 7, line 14, # 88 in Fig. 7) positioned centrally with respect to the left shoulder strap and the right shoulder strap on the back side of the body harness.

The left shoulder strap and said right shoulder strap each having a first non-resilient portion (page 5, lines 22-23 and page 6, line 1, ## 24, 26 in Fig. 3; page 7, lines 22-23, ## 62, 64 in Fig. 6) configured to extend from about a waistline of a user to about a shoulder level of the user, a second resilient stretchable portion (page 5, line 22, ## 40, 42) co-extensively fixedly attached to the first portion and configured to extend over a shoulder of the user and a third non-resilient portion co-extensively fixedly attached to the second portion and configured to extend along a back of the user (Figs 3-5, 6 and 7) to about the waistline of the user (Fig. 2).

Claim 2 contains independently patentable subject matter and provides that “each of the second portions of the left shoulder strap and the right shoulder strap is an elastomeric resilient portion located adjacent an apex of the shoulder strap (page 5, line 22, ## 40, 42).

Claim 3 is believed to be independently patentable; it recites provision of a permanent attachment of the resilient suspender assembly to the shoulder straps (page 7, lines 10-16, ## 94, 96 in Fig. 6). Claim 22 is believed to be independently patentable; it recites that the front ends of the first and second branches of the resilient suspender assembly are fixedly attached at specific locations on the shoulder straps (page 7, lines 10-16, ## 94, 96 in Fig. 6). Claim 23 is believed to be independently patentable; it recites that the front ends of the resilient suspender assembly are stitched to respective shoulder straps (page 7, lines 10-16, ## 94, 96 in Fig. 6).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

a. Claims 1-4, 22 and 23 were rejected under 35 U.S.C. 112, second paragraph. Examiner contends that “positively limiting of the harness with respect to the shoulder level, shoulder, and back of a user, as set forth in Claim 1, renders the claims indefinite. Therefore, the first issue on this appeal is whether rejection of Claims 1-4, 22 and 23 under 35 USC 112, second paragraph is proper, where the claims recite the structure of the harness in relation to the user’s body, and where the Specification and the drawings explain in detail the location of critical elements of the harness.

b. Claims 1-4, 22 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dennington in view of Cox. Examiner contends that Dennington shows the claimed harness with the exception of the shoulder straps having resilient portions. Examiner also contends that Cox in Fig. 4b shows a harness having should straps having resilient portions to prevent fatigue of a wearer. Examiner then contends that it “would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify the shoulder straps of Dennington to comprise elastic portions as claimed to prevent fatigue of a wearer. Examiner further contends that “to attach the suspender assembly of Dennington to his front left and right shoulder straps by the conventional method of sewing to enable a non-release attachment thereto, would have been obvious mechanical expedient.” The second issue on this appeal is therefore, whether Claims 1 – 4, 22 and 23 are obvious in view of the cited prior art, where the cited prior art, singly or in combination, fails to disclose, teach or suggest provision of a distinct resilient portion at the apex of each of the shoulder straps.

VII. ARGUMENT

I. Rejection Under 35 USC 112, Second Paragraph.

Claims 1 – 4, 22 and 23 were rejected under 35 USC 112, second paragraph. It is the Examiner’s position that positively limiting the harness with respect to the shoulder level, shoulder and back of a user, as recited in Claim 1, renders the claims indefinite allegedly because the applicant failed to particularly point out and distinctly claim the subject matter which the applicant regards as her invention.

The appellant respectfully disagrees and submits that full support to the claimed language is found in the Specification and the drawings as originally filed. MPEP 2173.02 provides:

The essential inquiry is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed not in a vacuum, but in light of:

- (A) the content of the particular application disclosure;
- (B) the teachings of the prior art; and

(C) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

The instant invention relates to a safety harness to be worn by a human. One of ordinary skill in the art is expected to review the claims in light of the specification. MPEP 2173.05(b). In the instant case, the application disclosure, including the specification and the drawings define the elements of a harness in relation to the human body parts, such as shoulder straps, leg straps, waist belt, etc. These definitions are conventional in such type of patent claim language. See, for instance, Claim 1 of patent No. 5,531,292 of record in this case; Claim 13 of patent No. 5,487,444 (the primary reference). The claim interpretation that would be given to the elements of Claim 1 will be easily understood by persons having the ordinary level of skill in the art of safety harnesses, as the terms relate to common designations (shoulder level, waistline of the user). For these reasons, it is believed that the rejection of Claim 1 under 35 USC 112, second paragraph is improper.

Claims 2, 3, 4, 22 and 23 do not have such limitations and should be independently patentable under 35 USC 112, second paragraph.

II. Rejection Under 35 USC 103(a)

Claims 1 - 4, 22 and 23 were rejected under 35 USC 103(a) as being unpatentable over Dennington in view of Cox. It is the Examiner's contention that "Dennington shows the claimed harness with the exception of the shoulder straps having resilient portions. Cox in fig. 4b shows a harness having shoulder straps having resilient portions to prevent fatigue of a wearer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

modify the shoulder straps of Dennington to comprise elastic portions as claimed to prevent fatigue of a wearer.”

The Appellant respectfully disagrees and submits that neither the primary nor the secondary references, taken alone or in combination, define the invention as recited in Claim 1. Obviousness is a legal question based on underlying factual determinations. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1566, 1 USPQ2d 1593, 1596 (Fed. Cir. 1987). Here, the primary reference teaches a harness, including shoulder straps, of conventional construction (col. 2, lines 65-66), made from leather, nylon webbing, or other strong, flexible material (col. 3, lines 1-3). As admitted by the Examiner, Dennington does not disclose provision of resilient stretchable shoulder straps.

The secondary reference of Cox discloses shoulder straps made in their entirety of a composite material - a section of an elastic material is sewn into a strap fabricated from conventional, non-elastic material, such nylon and/or polyester. See, col. 4, lines 61 - 67, Claims 1, 10.

The composite material of Cox will invariably react differently to loads imposed by a sudden fall on the shoulder straps. The extension of the composite material shoulder straps of Cox supporting the full weight of a user will not be similar to the extension afforded by a short resilient segment at the apex of the shoulder strap afforded to the user by the design of the present invention.

The present invention discloses a three-section shoulder strap: anterior portion from the waist up is made of non-stretchable material, the second portion that extends over the shoulders is made stretchable and resilient, and a third posterior portion is non-stretchable. Such

arrangement is not shown, suggested or described in any of the prior art references cited by the Examiner, singularly or in combination.

Even assuming, for the sake of an argument, that a safety harness designer would substitute the non-stretchable shoulder straps of Dennington with the composite material shoulder straps of Cox. Even then the harness designer will not receive the same benefits of the partially stretchable shoulder straps as afforded by the instant invention and claimed in Claim 1.

Moreover, obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. *W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). This is an illogical and inappropriate process. *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 38 USPQ2d 1551 (Fed. Cir. 1996). The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

Here, the state of the art teaches either totally non-stretchable or composite material harnesses. Nothing in the primary reference would suggest to the safety harness designer to add a stretchable element to non-stretchable straps, especially, if that harness is provided with the elastomeric cord assembly, as suggested by element 18 of Dennington.

For these reasons, it is believed that Claim 1 is allowable.

Claim 2 recites provision of an elastomeric resilient portion adjacent an apex of each shoulder strap. Neither Dennington, nor Cox suggest, teach or show such arrangement. For this reason, it is believed that Claim 2 contains allowable subject matter.

Claim 3 recites permanent attachment, such as by sewing, of the resilient suspender assembly to the shoulder straps. Cox does not disclose provision of an elastomeric suspender assembly. Therefore, the detail analysis below addresses the primary reference of Dennington only.

Dennington does not disclose provision of a resilient suspender assembly that is fixedly attached to the shoulder straps. As shown in Fig. 6 and described in Col. 7, lines 36 - 67 and col. 8, lines 1 - 6, Dennington employs an anterior D-ring 62 positioned and attached to the shoulder straps 36 and 38. A second pair of upper D-rings 104 is provided on the shoulder straps 36, 38 in a position above and posterior from the D-ring 62. Before the user puts on a harness, each anterior end 82 of the cord 68 is detached from the D-ring 62. The anterior end 82 is then threaded through the corresponding upper D-ring 104, and is reattached to the corresponding anterior D-ring 62.

Therefore, Dennington discloses a device, where the elastomeric suspender assembly is not fixedly, non-detachably attached to the shoulder straps. Each time a user puts on a harness of Dennington, the suspender assembly is threaded through the D-rings again. Such arrangement creates an undesirable weak link in the harness assembly. The present invention obviates this disadvantage by stitching the suspender assembly to the shoulder straps, below the elastomeric portions of the shoulder straps.

In equating the function of sewing to the concept of permanent, not detachable connection between the suspender and the harness, the Examiner erred and impermissibly used hindsight to arrive at the claimed invention. See *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record

convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.").

For these reasons, it is believed that Claim 3 contains allowable subject matter.

Claim 4 recites that each shoulder strap terminates at the belt. Cox does not provide for a waistline belt. Therefore, the detail analysis below addresses Dennington only.

Dennington's shoulder straps extend, at least at the front, below the belt and connect to the leg straps (see, Fig. 1-3). The shoulder straps of the instant harness are sewn, in the front and back, to the waist belt. Such structure is not shown by Dennington. When the harness of Dennington becomes subject to the shock of a sudden fall, the load will be transferred directly from the shoulder straps to the leg straps, at least at the front. Such design is different from the instant invention.

For these reasons, it is believed that Claim 4 contains allowable subject matter.

Claim 22 recites that the resilient harness assembly is attached to the shoulder straps below the resilient portion. Since neither Cox nor Dennington have such multi-portion shoulder straps they do not and cannot provide for the resilient harness to be secured in any particular place on the shoulder strap. Besides, as set forth above, Cox does not provide for a flexible suspender and Dennington does not provide for a fixed connection of the flexible suspender to the shoulder straps.

For these reasons, it is believed that Claim 22 contains allowable subject matter.

Claim 23 recites that the front ends of the resilient suspender branches are stitched to the shoulder straps. As set forth above, Cox does not teach provision of a resilient suspender assembly and Dennington does not provide for a fixed connection between the flexible suspender assembly and the shoulder straps.

For these reasons, it is believed that Claim 23 contains allowable subject matter.

In conclusions, the Appellant submits that there is no suggestion in the prior art that the teachings of the primary and secondary references should be combined in a manner recited in the instant application. It is well established that there must be some logical reason apparent from the evidence of record that would justify a combination or modification of references. *In re Regel*, 188 USPQ 132 (CCPA 1975). The question is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Therefore, even if all elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill in the art would have been prompted to combine the teachings of the cited references to arrive at the claimed invention. See, also *In re Hershler*, 591 F.2d 693, 200 USPQ 711 (CCPA 1979). If the only suggestion came from the applicant's own specification - prima facie case of obviousness cannot be established. *In re Jansson*, 609 F.2d 996, 203 USPQ 976 (CCPA 1979).

The applicant stresses that Claims 2, 3, 22 and 23 contain independently patentable subject matter because Claim 2 recites provision of an elastomeric resilient portion adjacent an apex of each shoulder strap; Claim 3 recites provision of a permanent attachment of the resilient suspender assembly to the shoulder straps; Claim 22 recites that the front ends of the first and second branches of the resilient suspender assembly are fixedly attached specific locations on the shoulder straps; Claim 23 recites that the front ends of the resilient suspender assembly are stitched to respective shoulder straps.

In view of the above, reconsideration of the rejection of Claims 1 – 4, 22 and 23 under 35 USC 112, second paragraph and 35 USC 103(a) and allowance of Claims 1-4, 22 and 23 is respectfully requested.

Please charge Deposit Account No. 11-0260 of the undersigned for the required fee. This

Appeal Brief is submitted in triplicate.

Respectfully submitted,



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On: 01/15/05
By: Debra Mengel
Debra Mengel

VIII. CLAIMS APPENDIX

Claims involved in the appeal:

1. A safety harness, comprising:

a body harness assembly positionable on a user's body, the body harness assembly comprising a left shoulder strap and a right shoulder strap, said shoulder straps crossing in a back side of the body harness, while sliding through a lanyard securing member;

a resilient suspender assembly having a first branch and a second branch, a front end of the first branch being fixedly attached to the left shoulder strap, a front end of the second branch being fixedly attached to the right shoulder strap, a back end of the first branch and a back end of the second branch being fixedly attached to the lanyard securing member positioned centrally with respect to the left shoulder strap and the right shoulder strap on the back side of the body harness;

said left shoulder strap and said right shoulder strap each having a first non-resilient portion configured to extend from about a waistline of a user to about a shoulder level of the user, a second resilient stretchable portion co-extensively fixedly attached to the first portion and configured to extend over a shoulder of the user and a third non-resilient portion co-extensively fixedly attached to the second portion and configured to extend along a back of the user to about the waistline of the user.

2. The device of Claim 1, wherein each of said second portions of said left shoulder strap and said right shoulder strap is an elastomeric resilient portion located adjacent an apex of the shoulder strap.

3. The device of Claim 1, wherein said first branch and said second branch of the suspender assembly is sewn to said left shoulder strap and said right shoulder strap respectively.

4. The device of Claim 1, wherein said body harness further comprises a belt for encircling the user's waist, and wherein each of said shoulder straps terminates at said belt.

22. The device of Claim 1, wherein said front end of the first branch is fixedly attached to the left shoulder strap below said second portion and wherein said front end of the second branch is fixedly attached to the right shoulder strap below said second portion.

23. The device of Claim 22, wherein said front end of the first branch is stitched to the left shoulder strap and the front end of the second branch is stitched to the left shoulder strap and to the right shoulder strap.

IX. EVIDENCE APPENDIX

NONE

X. RELATED PROCEEDINGS APPENDIX

NONE